

(19) World Intellectual Property Organization
International Bureau

SEP 22 2004

(43) International Publication Date
9 October 2003 (09.10.2003)

PCT

(10) International Publication Number
WO 03/081993 A2(51) International Patent Classification⁷: **A01K**

(21) International Application Number: PCT/US03/09288

(22) International Filing Date: 24 March 2003 (24.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/104,057 22 March 2002 (22.03.2002) US(71) Applicant: **ORIGEN THERAPEUTICS** [US/US]; 1450
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2558 (US).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ,
VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

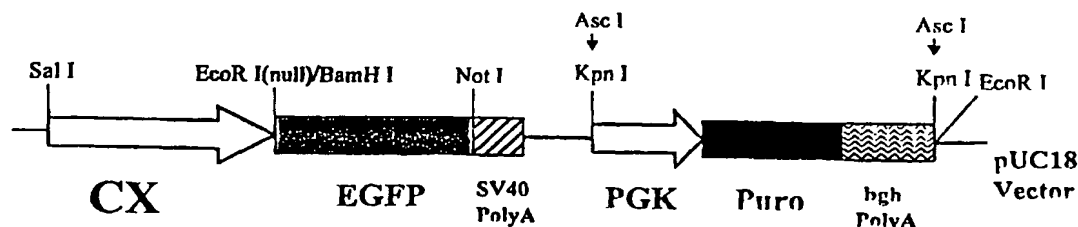
Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **TRANSGENIC AVES PRODUCING HUMAN POLYCLONAL ANTIBODIES****pCX/GFP/Puro**

(57) Abstract: Human antibodies are produced in transgenic chickens having functional genetic components of the human immune system stably integrated in the genome. Techniques are described to integrate unrearranged human heavy and light chain immunoglobulin loci into the genome of the transgenic chicken. The functional description of the endogenous immunoglobulin loci yields an animal whose antibody repertoire in response to antigen is fully human. In the preferred embodiment, the human immunoglobulin locus is at least as large as the native human locus and exhibits functional class switching to yield IgG isotype antibodies. In addition to monoclonal antibodies secreted from immortalized B cell populations, polyclonal antibodies may be obtained from eggs laid by the transgenic chickens of the invention.